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EXAMINER
LY, ANH VU H

ART UNIT	PAPER NUMBER
2662	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/316,518	Applicant(s) STANWOOD ET AL.	
	Examiner Anh-Vu H Ly	Art Unit 2662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 24-96 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) 78-87 is/are allowed.

6)☒ Claim(s) 24-77 and 88-96 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 7-8 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Specification

1. The substitute specification filed on January 22, 2002 has not been entered because it does not conform to 37 CFR 1.125(b)because: a marked up copy was not submitted. Further, there is a significant difference between the original specification and the substitute specification such as the title of the invention, the description of the field of invention, and the description of related art.

Drawings

2. The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on January 22, 2002 have been disapproved because they introduce new matter into the drawings. 37 CFR 1.121(a)(6) states that no amendment may introduce new matter into the disclosure of an application. There is a significant difference between the original drawings and the substitute drawings in all of the figures.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 24-33, 38-71, 73-77, 88-90, 92, 95, and 96, are rejected under 35 U.S.C. 102(e) as being anticipated by Basu et al. (US Patent No. 6,097,733). Hereinafter, referred to as Basu.

With respect to claims 24, 48, 62, 73, and 92, Basu discloses (col. 12, lines 1-35 and Figure 7) that the base station waits for an access request from the mobile unit (determining an uplink and downlink bandwidth requirement for the communication link, where requirements using associative and respective uplink and downlink bandwidth utilization parameters), upon receiving the request, the base station determines whether the access request from a wireless mobile unit operating within the service area and whether voice service or multimedia service is requested by the mobile unit, if voice service and multimedia service bandwidth required, bandwidth is allocated to the mobile unit (calculating and allocating uplink/downlink bandwidth in response to the requirements).

Further, Basu discloses (col. 13, lines 55-67 and Figure 9) that the bandwidth allocator of the system monitors multimedia data flow for each mobile terminal that has been allocated multimedia bandwidth (periodically enabling uplink and downlink transmissions during allocated time slots).

With respect to claims 25 and 49, Basu discloses (col. 12, lines 1-5 and Figure 7) that the base station waits for an access request from the mobile unit (uplink and downlink bandwidth requirements are determined when the link is installed in the communication system).

With respect to claim 26, Basu discloses (col. 13, lines 55-67 and Figure 9) that the bandwidth allocator of the system monitors multimedia data flow for each mobile terminal that has been allocated multimedia bandwidth (periodically monitoring bandwidth utilization parameters for uplink and downlink transmissions in the communication link).

With respect to claim 27, Basu discloses (col. 12, lines 1-5 and Figure 7) that the base station waits for an access request from the mobile unit (periodically monitoring requests for uplink and downlink transmissions in the communication link).

With respect to claim 28, Basu discloses (col. 13, line 55 – col. 14, line 53) that data flow is constantly monitored and additional bandwidth is allocated if the buffers of the mobile unit consistently exceed a threshold by a margin and vice versa, de-allocated bandwidth, if the buffers of the mobile unit falls below a threshold for a period of time (bandwidth requirements are periodically determined and associated uplink/downlink bandwidth requirement ratio for the link is periodically updated, and wherein the uplink

and downlink time slot allocations are updated periodically in response to the updated uplink/downlink bandwidth ratio).

With respect to claim 29, Basu discloses (col. 13, lines 55-67 and Figure 9) that the bandwidth allocator of the system monitors multimedia data flow for each mobile terminal that has been allocated multimedia bandwidth (uplink/downlink bandwidth requirements are periodically determined by continuously monitoring the transmissions in the communication link).

With respect to claims 30 and 50, as noted in the rejection statements of claim 24, different bandwidth is allocated upon the service request such as voice or multimedia service (uplink and downlink bandwidth requirements vary depending upon the type of service provided over the communication link).

With respect to claims 31 and 51, Basu discloses in Fig. 1 and 2, the mobile units can be laptop computer, desktop computer, cell phones, etc... (uplink and downlink bandwidth requirements vary depending upon the type of user of the communication link).

With respect to claim 32, Basu discloses in Fig. 1, transmissions are communicated via wireless links (communication link comprises a wireless communication link).

With respect to claim 33, Basu discloses (col. 10, lines 20-28) that in a TDMA mode, each of the modems 412 may be assigned a particular time division within which they can transmit and/or receive data. Furthermore, TDMA mode is well known in the art, in which a frame comprises a number of time slots, where slots are allocated for communications (uplink and downlink time slots are allocated using a frame-based time slot allocation approach).

With respect to claim 38, Basu discloses (col. 6, lines 23-35) that bandwidth selectively allocated to provide and satisfy the requirements for multimedia communications (bandwidth requirements are determined using a plurality of statistical bandwidth parameters).

With respect to claim 39, Basu discloses in Figure 7, wherein the base station receives a service request from a mobile unit and upon requested service, whether voice or multimedia, bandwidth is allocated to fulfill the service. Further, Basu discloses (col. 13, line 55 – col. 14, line 30) that the bandwidth allocator of the system monitors multimedia data flow for each mobile terminal that has been allocated multimedia bandwidth and additional bandwidth is allocated if necessary (initial and actual set of parameters).

With respect to claim 40, Basu discloses in Figure 7, wherein the base station receives a service request from a mobile unit and upon requested service, whether voice or multimedia, bandwidth is allocated to fulfill the service (initial set of parameters are set when the communication link is installed). Further, Basu discloses (col. 13, line 55 – col. 14, line 30) that the bandwidth allocator of the system monitors multimedia data flow for each mobile terminal that has been allocated multimedia bandwidth and additional bandwidth is allocated if necessary (actual set of parameters are periodically updated as the uplink and downlink bandwidth utilization of the communication link varies).

With respect to claims 41 and 66, Basu discloses (col. 6, lines 23-35) that by using available bandwidth, the number of users who may access the base station within the service area is maximized, the relative performance achieved by each mobile units is maximized and the overall system usage is maximized as well (initial set of parameters are based upon an estimate of the number of users and the type of user of the communication link).

With respect to claim 42, Basu discloses (col. 12, lines 1-35 and Figure 7) that the base station waits for an access request from the mobile unit (means for determining an uplink and downlink bandwidth requirement for the communication link, where requirements using associative and respective uplink and downlink bandwidth utilization parameters), upon receiving the request, the base station determines whether the access request from a wireless mobile unit operating within the service area and

whether voice service or multimedia service is requested by the mobile unit, if voice service and multimedia service bandwidth required, bandwidth is allocated to the mobile unit (means for calculating and means allocating uplink/downlink bandwidth in response to the requirements).

Further, Basu discloses (col. 13, lines 55-67 and Figure 9) that the bandwidth allocator of the system monitors multimedia data flow for each mobile terminal that has been allocated multimedia bandwidth (means for periodically enabling uplink and downlink transmissions during allocated time slots).

With respect to claim 43, Basu discloses (col. 13, lines 55-67 and Figure 9) that the bandwidth allocator of the system monitors multimedia data flow for each mobile terminal that has been allocated multimedia bandwidth (periodically monitoring bandwidth utilization parameters for uplink and downlink transmissions in the communication link).

With respect to claim 44, Basu discloses (col. 12, lines 1-5 and Figure 7) that the base station waits for an access request from the mobile unit (periodically monitoring requests for uplink and downlink transmissions in the communication link).

With respect to claim 45, the limitation, wherein the determining, calculating and allocating means comprise a computer program executing on a programmable processor, is inherently disclosed by Basu. As noted in claim 42, Basu discloses a

method for determining, allocating bandwidth based on the available bandwidth, and monitoring the data flow of the link. It is well known in the art, methods executed by programs.

With respect to claims 46 and 76, Basu discloses (col. 7, lines 1-10) that the management capabilities provide feedback to a system manager, indicating to the manager how well the communication system is performing in meeting the minimum transmission rate. The system manager may then allocate or de-allocate system resources to adjust the available bandwidth in the communication system based upon the information provided. Further, as noted in previous claims, a base station receives a request for service and allocates necessary bandwidth for the service (programmable processor is in a cluster controller, and wherein cluster controller controls a plurality of base stations in a wireless system, and wherein one selected base station controls transmissions in the communication link).

With respect to claim 47, Basu discloses in Fig. 1, transmissions are communicated via wireless links (communication link comprises a wireless communication link between the selected base station and a CPE).

With respect to claim 52, Basu discloses (see Abstract) a method for managing bandwidth in a wireless communication system where time division and code division are implemented according to the invention. It is well known in the art, in time division,

a frame comprises a number of slots, where slots are assigned for uplink and downlink transmissions.

Basu discloses in Figure 7, a request for service is received at the base station (receiving bandwidth requests at the base station for bandwidth on the uplink subframe), bandwidth then allocated upon the requested service such as voice or multimedia service (apportioning frame between the uplink subframe and downlink subframe according to bandwidth requests). Further, Basu discloses in Figure 3, a transceiver for receiving request and inform the bandwidth allocation (notifying CPE as how fixed-length frame was apportioned).

With respect to claim 53, Basu discloses (col. 6, lines 23-35) that by using available bandwidth, the number of users who may access the base station within the service area is maximized, the relative performance achieved by each mobile units is maximized and the overall system usage is maximized as well (analyzing the requests is performed to maximize the usable bandwidth of the fixed-length frame).

With respect to claims 54-56, 67-69, 75, and 77, the limitations, analyzing the requests includes determining the uplink and downlink subframe bandwidth for a previous fixed-length frame, and determining the potential bandwidth requirements from at least one CPE, are inherently discloses by Basu.

Basu discloses (col. 13, line 55 – col. 14, line 53) that data flow is constantly monitored and additional bandwidth is allocated if the buffers of the mobile unit

consistently exceed a threshold by a margin and vice versa, de-allocated bandwidth, if the buffers of the mobile unit falls below a threshold for a period of time.

With respect to claim 57, Basu discloses (col. 12, lines 1-5 and Figure 7) that the base station waits for an access request from the mobile unit (periodically monitoring requests for uplink and downlink transmissions in the communication link).

With respect to claim 58, as noted in the rejection statements of claim 24, different bandwidth is allocated upon the service request such as voice or multimedia service (bandwidth requirements vary depending upon the type of service provided over the communication link).

With respect to claim 59, Basu discloses in Fig. 1 and 2, the mobile units can be laptop computer, desktop computer, cell phones, etc... (bandwidth requirements vary depending upon the type of user of the communication link).

With respect to claim 60, Basu discloses in Fig. 1, transmissions are communicated via wireless links (communication link comprises a wireless communication link).

With respect to claim 61, Basu discloses (col. 12, lines 1-5 and Figure 7) that the base station waits for an access request from the mobile unit (bandwidth requirements are determined when the link is installed in the communication system).

With respect to claims 63-65, Basu discloses (col. 12, lines 1-5 and Figure 7) that the base station waits for an access request from the mobile unit (requests include requests for uplink frame and summing the bandwidth requests for uplink frame).

With respect to claim 70, Basu discloses in Figure 7, a request for service is received by the base station indicating whether voice or multimedia service and bandwidth then allocated upon the request for service (initializing base station with an initial set of bandwidth parameters including a first estimate of bandwidth requirements of at least one CPE). Further, Basu discloses (col. 13, line 55 – col. 14, line 53) that data flow is constantly monitored (monitoring bandwidth use by CPE and base station) and additional bandwidth is allocated if the buffers of the mobile unit consistently exceed a threshold by a margin and vice versa, de-allocated bandwidth, if the buffers of the mobile unit falls below a threshold for a period of time (updating initial set of bandwidth utilization with an actual set of bandwidth utilization parameters based on monitoring).

With respect to claim 71, as noted in the rejection statements of claim 70, data flow is constantly monitored and updated (updating initial set of bandwidth utilization

parameters includes determining a second estimate of bandwidth requirements of at least one CPE).

With respect to claim 74, Basu discloses in Figure 1, a communication system between mobile units and a base station (at least one CPE configured to demodulate and modulate uplink and downlink subframe portion). The mobile units include a terminal circuitry for modulating and demodulating signal. The base station includes a host circuitry for demodulating and modulating the received and transmitted signal (a base station configured to demodulate and modulate uplink and downlink subframe portion, wherein the lengths of subframe portions are based on bandwidth requirements of at least one CPE and base station).

With respect to claim 88, Basu discloses (col. 12, lines 1-35 and Figure 7) that the base station waits for an access request from the mobile unit, upon receiving the request, the base station determines whether the access request from a wireless mobile unit operating within the service area and whether voice service or multimedia service is requested by the mobile unit, if voice service and multimedia service bandwidth required, bandwidth is allocated to the mobile unit (first and second service type, determining first and second service bandwidth requirement, calculating and allocating bandwidth requirements in response to the services).

Further, Basu discloses (col. 13, lines 55-67 and Figure 9) that the bandwidth allocator of the system monitors multimedia data flow for each mobile terminal that has

been allocated multimedia bandwidth (periodically enabling uplink and downlink transmissions during allocated time slots).

With respect to claims 89 and 90, the limitations, first service type is sensitive to transmission delays and second service type is insensitive to transmissions delays and comparing sensitivities to a transmission delay for the first service type and second service type, are inherently disclosed by Basu.

Basu discloses in Figure 7 that bandwidth allocation is depended upon the request for service, either voice and/or multimedia, from the mobile unit (comparing sensitivities). For voice transmissions, transmission delays are not tolerated, while for multimedia transmissions such as downloading pictures or music, transmission delays are acceptable.

With respect to claim 96, the limitation, selected quality of service is based on type of service and data latency requirements, is inherently disclosed by Basu.

Basu discloses, as noted in previous claims, a base station receives a request for service from a mobile unit and determines whether a voice or multimedia type service, and allocates necessary bandwidth for that service. Further, Basu discloses in Figure 1, a communication system supports a wide range of services such as voice and multimedia applications. For voice transmissions, transmission delays are not tolerated, while for multimedia transmissions such as downloading pictures or music, transmission delays are acceptable.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 34-37, 72, 91, 93-95 are rejected under 35 U.S.C. 103(a) as being unpatentable over Basu in view of Hamalainen et al. (US Patent No. 5,640,395). Hereinafter, referred to as Hamalainen.

With respect to claims 34-37, Basu discloses a communication system for providing wireless voice and multimedia services and a method for managing bandwidth in a wireless communication system. Further, Basu discloses that in a TDMA mode, each of the modems 412 may be assigned a particular time division within which they can transmit and/or receive data.

Basu does not disclose the allocation approach comprises allocating a first number of time slots N1 for downlink or uplink transmissions, allocating remaining time slots N2 for uplink or downlink transmissions. Further, wherein allocating remaining time slots N2 are used for both uplink and downlink transmissions.

Hamalainen discloses (col. 11, lines 11-17) that in TDMA frames there is assigned a variable number of time slots designated for packet data transmission, the number of assigned time slots being a function of one of a symmetricity and an asymmetricity of the packet data transmission, and also on a total demand for packet

data transmission in the cell. This means, in a TDMA frame, some slots are designated for uplink transmission and some slots are designated for downlink transmissions. Furthermore, a number of time slots assigned can vary according to the demand for data transmission.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to adapt an asymmetrical assigning method of time slots in a TDMA frame in Basu's communication system, as disclosed by Hamalainen, to fulfill demanded services from users.

With respect to claim 72, Basu discloses in Figure 7, a request for service is received by the base station indicating whether voice or multimedia service and bandwidth then allocated upon the request for service (initializing base station with an initial set of bandwidth parameters including a first estimate of bandwidth requirements of at least one CPE). Further, Basu discloses (col. 13, line 55 – col. 14, line 53) that data flow is constantly monitored (monitoring bandwidth use by CPE and base station) and additional bandwidth is allocated if the buffers of the mobile unit consistently exceed a threshold by a margin and vice versa, de-allocated bandwidth, if the buffers of the mobile unit falls below a threshold for a period of time (updating initial set of bandwidth utilization with an actual set of bandwidth utilization parameters based on monitoring).

Basu does not disclose duration of downlink frame request exceeds uplink frame request, extending and notifying at least one CPE of the extended downlink frame and reducing uplink frame.

Hamalainen discloses (col. 11, lines 11-17) that in TDMA frames there is assigned a variable number of time slots designated for packet data transmission, the number of assigned time slots being a function of one of a symmetricity and an asymmetricity of the packet data transmission, and also on a total demand for packet data transmission in the cell. This means, in a TDMA frame, some slots are designated for uplink transmission and some slots are designated for downlink transmissions. Furthermore, a number of time slots assigned can vary according to the demand for data transmission.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to adapt an asymmetrical assigning method of time slots in a TDMA frame in Basu's communication system, as disclosed by Hamalainen, to fulfill demanded services from users.

With respect to claim 91, Basu inherently discloses one service type is sensitive to transmission delay while another service type is insensitive to transmission delay.

Basu does not disclose shifting uplink/downlink bandwidth ratio to reduce transmission delay of first service type at the expense of increasing transmission delay of second service type.

Hamalainen discloses (col. 11, lines 11-17) that in TDMA frames there is assigned a variable number of time slots designated for packet data transmission, the number of assigned time slots being a function of one of a symmetricity and an asymmetricity of the packet data transmission, and also on a total demand for packet data transmission in the cell. This means, in a TDMA frame, some slots are designated for uplink transmission and some slots are designated for downlink transmissions. Furthermore, a number of time slots assigned can vary according to the demanded service.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to adapt an asymmetrical assigning method of time slots in a TDMA frame in Basu's communication system, as disclosed by Hamalainen, to fulfill demanded services from users.

With respect to claims 93-94, Basu discloses (see Abstract) a method for managing bandwidth in a wireless communication system where time division and code division are implemented according to the invention. It is well known in the art, in time division, a frame comprises a number of slots, where slots are assigned for uplink and downlink transmissions.

Basu does not disclose split the uplink time slots and downlink time slots into equal and unequal portions.

Hamalainen discloses (col. 11, lines 11-17) that in TDMA frames there is assigned a variable number of time slots designated for packet data transmission, the

number of assigned time slots being a function of one of a symmetricity and an asymmetricity of the packet data transmission, and also on a total demand for packet data transmission in the cell. This means, in a TDMA frame, some slots are designated for uplink transmission and some slots are designated for downlink transmissions. Furthermore, a number of time slots assigned can vary according to the demanded service.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to adapt an asymmetrical assigning method of time slots in a TDMA frame in Basu's communication system, as disclosed by Hamalainen, to fulfill demanded services from users.

With respect to claim 95, Basu discloses (col. 13, line 55 – col. 14, line 53) that data flow is constantly monitored and additional bandwidth is allocated if the buffers of the mobile unit consistently exceed a threshold by a margin and vice versa, de-allocated bandwidth, if the buffers of the mobile unit falls below a threshold for a period of time (calculating actual uplink/downlink bandwidth ratio based on quality of service).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Petranovich (U.S. Patent No. 5,710,762) discloses an improved frame structure for use in mobile communications systems.

Rudrapatna et al. (U.S. Patent No. 5,592,470) discloses an optimal static and dynamic bandwidth/channel allocation.

Chow et al. (U.S. Patent No. 5,479,447) discloses a method and apparatus for adaptive, variable bandwidth, high-speed data transmission in a multicarrier signal over DSL.

Hinderks et al. (U.S. Patent No. 6,049,551) discloses a method and apparatus for dynamic allocation of transmission bandwidth resources.

Dail et al. (U.S. Patent No. 5,953,344) discloses a method and apparatus enabling enhanced throughput efficiency by use of dynamically adjustable mini-slots in access protocols for shared transmission media.

Chawla et al. (U.S. Patent No. 6,137,787) discloses a method and apparatus for resource assignment in a wireless communication system.

Rikkinen et al. (U.S. Patent No. 6,031,827) discloses a method for radio resource control.

Loukianov (U.S. Patent No. 6,249,526) discloses a versatile TDMA slot assignment unit.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh-Vu H Ly whose telephone number is 703-306-5675. The examiner can normally be reached on Monday-Friday 7:00am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 703-305-4744. The fax phone numbers

for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4750.

avl
May 20, 2002

HASSAN KIZOU
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